

Communication sous forme de **poster** :

ESF-EMBO Symposium

Epigenetics in Context: From Ecology to Evolution

18-23 September 2011

Hotel Eden Roc, Sant Feliu de Guixols, Spain

Titre :

Distribution and conservation of Banana Streak Virus (BSV) within banana Musa balbisiana genome : what impact on host and virus evolution ? **Pierre-Olivier Duroy**, Xavier Perrier, Matthieu Chabannes, Nathalie Laboureau & Marie-Line Iskra-Caruana

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Résumé :

The nuclear genome of several plants is invaded by numerous viral sequences. These integrations correspond to accidental events mainly resulting from illegitimate recombination of DNA viruses belonging to the family *Caulimoviridae* with plant DNA whereas integration into the host genome is not required for viral replication. These integrations are for the most part defective as a result of pseudogenisation driven by the host genome evolution. Conversely some, named infectious, could release a functional viral genome following activating stresses. Our aim is to study the evolving integration context of such infectious integrants for Banana streak virus among the diversity of the banana B genome in order to retrace the evolutionary BSV story and understand their impact on host and virus evolution in terms of cost/benefit. To answer this question, we propose to characterize the infectious integrants (eBSV) among a representative sampling of *Musa balbisiana* diversity and to hypothesize a contribution of eBSV towards plant virus resistance through an RNA interfering mechanism versus virus maintain through interspecific crosses.